U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION X
IDAHO OPERATIONS OFFICE
422 WEST WASHINGTON STREET
BOISE, IDAHO 83702

July 22, 1988

Chris James, General Manager
Cyprus Thompson Creek Mine
P.O. Box 62
Clayton, Idaho 83227

RE: NPDES Compliance Inspection
Permit No. ID-002540-2

Dear Mr. James:

Attached for your information are the results of an NPDES compliance inspection conducted at the Cyprus Thompson Creek Mine on May 25, 1988. Sample results verify compliance with current permit requirements.

The assistance of Mr. Doughty during the inspection was appreciated.

Sincerely,

Wally Scarburgh
Idaho Permits Coordinator

Enclosure

cc: Bob Braun, IDHW-DEQ, Boise
Greg Kellogg, WD-135

BN0910B

United States Environmental Protection Agency
Washington, D.C. 20460

EPA NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 W 2 5	3 ID0025402 11	12 880525 17	18 S	19 E	20 4

Remarks

66

Reserved	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70	71	72	73 74	75 80

Section B: Facility Data

Name and Location of Facility Inspected: Cyprus Mining Co. - Thompson Creek, P.O. Box 62, Clayton, Id. 83227

Entry Time ☐ AM ☐ PM

Exit Time/Date

Permit Effective Date: 6/10/81

Permit Expiration Date: 6/10/86

Name(s) of On-Site Representative(s): Bert Doughty

Title(s): Supervisor Environmental Affairs

Phone No(s): 838-2200

Name, Address of Responsible Official: Chris James, P.O. Box 62, Clayton, Id. 83227

Title: General Manager

Phone No.: 838-2200

Contacted ☐ Yes ☑ No

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	N	Pretreatment	S	Operations & Maintenance
S	Records/Reports	N	Laboratory	N	Compliance Schedules	N	Sludge Disposal
S	Facility Site Review	S	Effluent/Receiving Waters	S	Self-Monitoring Program	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

See Attachment

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JUL 25 1988
WATER COMPLIANCE SECTION
EPA - REGION 10

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone	Date
Dan R. M[illegible]	EPA/IOO/554-1450	5/25/88

Signature of Reviewer	Agency/Office	Date

Regulatory Office Use Only

Action Taken	Date	Compliance Status
		☐ Noncompliance ☐ Compliance

EPA Form 3560-3 (Rev. 3-85) Previous editions are obsolete.

Recd JS 07/25/88

Records, Reports, and Schedules Checklist

A. Permit Verification

YES NO N/A	INSPECTION OBSERVATIONS VERIFY INFORMATION CONTAINED IN PERMIT
Yes No N/A	1. Correct name and mailing address of permittee.
Yes No N/A	2. Facility is as described in permit.
Yes No N/A	3. Notification has been given to EPA/State of new, different, increased discharges.
Yes No N/A	4. Accurate records of influent volume are maintained, when appropriate.
Yes No N/A	5. Number and location of discharge points are as described in the permit.
Yes No N/A	6. Name and location of receiving waters are correct.
Yes No N/A	7. All discharges are permitted.

B. Recordkeeping and Reporting Evaluation

YES NO N/A	RECORDS AND REPORTS ARE MAINTAINED AS REQUIRED BY PERMIT
Yes No N/A	1. All required information is available, complete, and current; and
Yes No N/A	2. Information is maintained for required period.
Yes No N/A	3. Analytical results are consistent with the data reported on the DMR's.
	4. Sampling and Analysis Data are adequate and include:
Yes No N/A	a. Dates, times, location of sampling
Yes No N/A	b. Name of individual performing sampling
Yes No N/A	c. Analytical methods and techniques
Yes No N/A	d. Results of analysis
Yes No N/A	e. Dates of analysis
Yes No N/A	f. Name of person performing analysis
Yes No N/A	g. Instantaneous flow at grab sample stations
	5. Monitoring records are adequate and include
Yes No N/A	a. Flow, pH, D.O., etc. as required by permit
Yes No N/A	b. Monitoring charts
Yes No N/A	6. Laboratory equipment calibration and maintenance records are adequate.
	7. Plant Records are adequate* and include
Yes No N/A	a. O&M Manual
Yes No N/A	b. "As-built" engineering drawings
Yes No N/A	c. Schedules and dates of equipment maintenance and repairs
Yes No N/A	d. Equipment supplies manual
Yes No N/A	e. Equipment data cards
	*Required only for facilities built with Federal construction grant funds.

Yes No N/A	8. Pretreatment records are adequate and include:
Yes No N/A	a. Industrial Waste Ordinance (or equivalent documents)
Yes No N/A	b. Inventory of industrial waste contributors, including:
Yes No N/A	1. Compliance records
Yes No N/A	2. User charge information

Yes No N/A	9. SPCC properly completed, when required.

Yes No N/A	10. Best Management Practices Program available, when required.

C. Compliance Schedule Status Review

YES NO N/A	THE PERMITTEE IS MEETING THE COMPLIANCE SCHEDULE
Yes No N/A	1. The permittee has obtained necessary approvals to begin construction.
Yes No N/A	2. Financing arrangements are complete.
Yes No N/A	3. Contracts for engineering services have been executed.
Yes No N/A	4. Design plans and specifications have been completed.
Yes No N/A	5. Construction has begun.
Yes No N/A	6. Construction is on schedule.
Yes No N/A	7. Equipment acquisition is on schedule.
Yes No N/A	8. Construction has been completed.
Yes No N/A	9. Start-up has begun.
Yes No N/A	10. The permittee has requested an extension of time.
Yes No N/A	11. The permittee has met compliance schedule.

Records, Reports, and Schedules Checklist

D. POTW Pretreatment Requirements Review

YES NO N/A	THE FACILITY IS SUBJECT TO PRETREATMENT REQUIREMENTS
	1. Status of POTW Pretreatment Program
Yes No N/A	a. The POTW Pretreatment Program has been approved by EPA. (If not, is approval in progress? _____)
Yes No N/A	b. The POTW is in compliance with the Pretreatment Program Compliance Schedule. (If not, note why, what is due, and intent of the POTW to remedy)

	2. Status of Compliance with Categorical Pretreatment Standards.
Yes No N/A	a. How many industrial users of the POTW are subject to Federal or State Pretreatment Standards? _____
Yes No N/A	b. Are these industries aware of their responsibility to comply with applicable standards?
Yes No N/A	c. Have baseline monitoring reports (403.12) been submitted for these industries?
Yes No N/A	i. Have categorical industries in noncompliance (on EMR reports) submitted compliance schedules?
Yes No N/A	ii. How many categorical industries on compliance schedules are meeting the schedule deadlines? _____
Yes No N/A	d. If the compliance deadline has passed, have all industries submitted 90 day compliance reports?
Yes No N/A	e. Are all categorical industries submitting the required semiannual report?
Yes No N/A	f. Are all new industrial discharges in compliance with new source pretreatment standards?
Yes No N/A	g. Has the POTW submitted its annual pretreatment report?
Yes No N/A	h. Has the POTW taken enforcement action against noncomplying industrial users?
Yes No N/A	i. Is the POTW conducting inspections of industrial contributors?

Yes No N/A	3. Are the industrial users subject to Prohibited Limits (403.5) and local limits more stringent than EPA in compliance? (If not, explain why, including need for revision of limits.)

Yes No N/A	1. Standby power or other equivalent provision is provided.
Yes No N/A	2. Adequate alarm system for power or equipment failures is available.
Yes No N/A	3. POTW handles and disposes of sludge according to applicable Federal, State, and and local regulations.
Yes No N/A	4. All treatment units, other than back-up units, are in service.
Yes No N/A	5. Procedures for facility operation and maintenance exist.
Yes No N/A	6. Organization plan (chart) for operation and maintenance is provided.
Yes No N/A	7. Operating schedules are established.
Yes No N/A	8. Emergency plan for treatment control is established.
	9. Operating management control documents are current and include:
Yes No N/A	a. Operating report
Yes No N/A	b. Work schedule
Yes No N/A	c. Activity report (time cards)
	10. Maintenance record system exists and includes:
Yes No N/A	a. As-built drawings
Yes No N/A	b. Shop drawings
Yes No N/A	c. Construction specifications
Yes No N/A	d. Maintenance history
Yes No N/A	e. Maintenance costs
Yes No N/A	11. Adequate number of qualified operators are on-hand.
Yes No N/A	12. Established procedures are available for training new operators.
Yes No N/A	13. Adequate spare parts and supplies inventory and major equipment specifications are maintained.
Yes No N/A	14. Instruction files are kept for operation and maintenance of each item of major equipment.
Yes No N/A	15. Operation and maintenance manual is available.
Yes No N/A	16. Regulatory agency was notified of by-passing. (Dates _____)

Yes (No) N/A	17. Hydraulic and/or organic overloads are experienced. Reasons for overloads _____
(Yes) No N/A	18. Up-to-date equipment repair records are maintained.
(Yes) No N/A	19. Dated tags show out of service equipment.
(Yes) No N/A	20. Routine and preventive maintenance are scheduled/performed on time.

Permittee Sampling Inspection Checklist

A. Permittee Sampling Evaluation

(Yes) No N/A	1. Samples are taken at sites specified in permit.
(Yes) No N/A	2. Locations are adequate for representative samples.
Yes No (N/A)	3. Flow proportioned samples are obtained where required by permit.
(Yes) No N/A	4. Sampling and analysis completed on parameters specified by permit.
(Yes) No N/A	5. Sampling and analysis done in frequency specified by permit.
(Yes) No N/A	6. Permittee is using method of sample collection required by permit. Required Method: Grab If not, method being used is: ( ) Grab ( ) Manual composite ( ) ( ) Automatic composite
(Yes) No N/A Yes (No) N/A	7. Sample collection procedures are adequate: a. Samples refrigerated during compositing b. Preservation techniques used c. Containers and sample holding times before analyses conform with 40 CFR 136.3
Yes No (N/A)	8 Monitoring and analyses are performed more often than required by permit. If so, results reported in permittee's self-monitoring report.

B Sampling Inspection Procedures and Observations

(Yes) No N/A	1. Grab samples obtained.
Yes No (N/A)	2. Composite sample obtained Compositing frequency _____ Preservation _____
Yes No (N/A)	3. Sample refrigerated during compositing.
Yes No (N/A)	4. Flow proportioned sample obtained.
Yes No (N/A)	5. Sample obtained from facility sampling device.
(Yes) No N/A	6. Sample representative of volume and nature of discharge.
Yes No (N/A)	7. Sample split with permittee.
(Yes) No N/A	8. Chain of custody procedures employed.

A. Flow Measurement Inspection Checklist – General

Yes	No	N/A	1. Primary flow measuring device is properly installed and maintained.
Yes	No	N/A	2. Flow records are properly kept.
Yes	No	N/A	3. Sharp drops or increases in flow values are accounted for.
Yes	No	N/A	4. Actual flow discharged is measured.
Yes	No	N/A	5. Influent flow is measured before all return lines.
Yes	No	N/A	6. Effluent flow is measured after all return lines.
Yes	No	N/A	7. Secondary instruments (totalizers, recorders, etc.) are properly operated and maintained.
Yes	No	N/A	8. Spare parts are stocked.

B. Flow Measurement Inspection Checklist – Flumes

Yes	No	N/A	1. Flow entering flume appears reasonably well distributed across the channel and free of turbulence, boils, or other distortions.
Yes	No	N/A	2. Cross-sectional velocities at entrance are relatively uniform .
Yes	No	N/A	3. Flume is clean and free of debris or deposits.
Yes	No	N/A	4. All dimensions of flume are accurate.
Yes	No	N/A	5. Side walls of flume are vertical and smooth.
Yes	No	N/A	6. Sides of flume throat are vertical and parallel.
Yes	No	N/A	7. Flume head is being measured at proper location.
Yes	No	N/A	8. Measurement of flume head is zeroed to flume crest.
Yes	No	N/A	9. Flume is of proper size to measure range of existing flow.
Yes	No	N/A	10. Flume is operating under free-flow conditions over existing range of flows.

C. Flow Measurement Inspection Checklist – Wiers

V-notches			1. What type of weir is being used?
(Yes)	No	N/A	2. The weir is exactly level.
(Yes)	No	N/A	3. The weir plate is plumb and its top edges are sharp and clean.
(Yes)	No	N/A	4. There is free access for air below the nappe of the weir.
(Yes)	No	N/A	5. Upstream channel of weir is straight for at least four times the depth of water level, and free from disturbing influences.
(Yes)	No	N/A	6. The stilling basin of the weir is of sufficient size and clear of debris.
(Yes)	No	N/A	7. Head measurements are properly made by facility personnel.
(Yes)	No	N/A	8. Proper flow tables are used by facility personnel.

D. Flow Measurement Inspection Checklist – Other Flow Devices

			1. Type of flowmeter used: _____
			2. What are the most common problems that the operator has had with the flowmeter?
			3. Measured Wastewater flow: _____ mgd; Recorded flow: _____ mgd; Error ___ %
			4. Design flow: _____ mgd.
Yes	No	N/A	5. Flow totalizer is properly calibrated.
			6. Frequency of routine inspection by proper operator: _____/day.
			7. Frequency of maintenance inspections by plant personnel: _____/year.
			8. Frequency of flowmeter calibration: _____/month.
Yes	No	N/A	9. Flow measurement equipment adequate to handle expected ranges of flow rates.
Yes	No	N/A	10. Venturi meter is properly installed and calibrated.
Yes	No	N/A	11. Electromagnetic flowmeter is properly calibrated.

Laboratory Quality Assurance Checklist

A. General

Yes No N/A	1. Written laboratory quality assurance manual is available.

B. Laboratory Procedures

Yes No N/A	1. EPA approved analytical testing procedures are used.
Yes No N/A	2. If alternate analytical procedures are used, proper approval has been obtained.
Yes No N/A	3. Calibration and maintenance of instruments and equipment is satisfactory.
Yes No N/A	4. Quality control procedures are used.
Yes No N/A	5. Quality control procedures are adequate.
	6. Duplicate samples are analyzed ____ % of time.
	7. Spiked samples are used ____ % of time.
Yes No N/A	8. Commercial laboratory is used Name Analytical Laboratories Address _____ Contact _____ Phone _____

C. Laboratory Facilities and Equipment

Yes No N/A	1. Proper grade distilled water is available for specific analysis.
Yes No N/A	2. Dry, uncontaminated compressed air is available.
Yes No N/A	3. Fume hood has enough ventilation capacity.
Yes No N/A	4. The laboratory has sufficient lighting.
Yes No N/A	5. Adequate electrical sources are available.
Yes No N/A	6. Instruments/equipment are in good condition.
Yes No N/A	7. Written requirements for daily operation of instruments are available.

C. Laboratory Facilities and Equipment (continued)

Yes No N/A	8. Standards are available to perform daily check procedure.
Yes No N/A	9. Written trouble shooting procedures for instruments are available.
Yes No N/A	10. Schedule for required maintenance exists.
Yes No N/A	11. Proper volumetric glassware is used.
Yes No N/A	12. Glassware is properly cleaned.
Yes No N/A	13. Standard reagents and solvents are properly stored.
Yes No N/A	14. Working standards are frequently checked.
Yes No N/A	15. Standards are discarded after recommended shelf life has expired.
Yes No N/A	16. Background reagents and solvents run with every series of samples.
Yes No N/A	17. Written procedures exist for cleanup, hazard response methods, and applications of correction methods for reagents and solvents.
Yes No N/A	18. Gas cylinders are replaced at 100-200 psi.

D. Laboratory's Precision, Accuracy, and Control Procedures

Yes No N/A	1. A minimum of seven replicates is analyzed for each type of control check and this information is on record.
Yes No N/A	2. Plotted precision and accuracy control charts are used to determine whether valid, questionable, or invalid data are being generated from day to day.
Yes No N/A	3. Control samples are introduced into the train of actual samples to ensure that valid data are being generated.
Yes No N/A	4. The precision and accuracy of the analyses are good.

E. Data Handling and Reporting

Yes No N/A	1. Round-off rules are uniformly applied.
Yes No N/A	2. Significant figures are estabished for each analysis
Yes No N/A	3. Provision for cross-checking calculation is used
Yes No N/A	4. Correct formulas are used to reduce to simplest factors for quick, correct calculation
Yes No N/A	5. Control chart approach and statistical calculations for quality assurance and report are available and followed
Yes No N/A	6. Report forms have been developed to provide complete data documentation and permanent records and to facilitate data processing
Yes No N/A	7. Data are reported in proper form and units
Yes No N/A	8. Laboratory records are kept readily available to regulatory agency for required period of time
Yes No N/A	9. Laboratory notebook or preprinted data forms are permanently bound to provide good documentation
Yes No N/A	10. Efficient filing system exists enabling prompt channeling of report copies

F. Laboratory Personnel

Yes No N/A	1. The analyst has appropriate training
Yes No N/A	2. The analyst follows the specified procedures
Yes No N/A	3. The analyst is skilled in performing analyses

U.S. GOVERNMENT PRINTING OFFICE: 1984 ...

	SAMPLE MEASUREMENT				001
	PERMIT REQUIREMENT				
TSS mg/l	SAMPLE MEASUREMENT			6	
	PERMIT REQUIREMENT			30	
T. Rec. As mg/l	SAMPLE MEASUREMENT			<.010	
	PERMIT REQUIREMENT			.49	
T. Rec. Cd mg/l	SAMPLE MEASUREMENT			<.001	
	PERMIT REQUIREMENT			.0053	
T. Rec. Cu mg/l	SAMPLE MEASUREMENT			<.010	
	PERMIT REQUIREMENT			.0275	
T. Rec. Pb mg/l	SAMPLE MEASUREMENT			<.003	
	PERMIT REQUIREMENT			.0150	
T. Rec. Hg mg/l	SAMPLE MEASUREMENT			<.0005 ~~<.00005~~	
	PERMIT REQUIREMENT			non-det.	
T. Rec. Zn mg/l	SAMPLE MEASUREMENT			.027	
	PERMIT REQUIREMENT			.163	
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				

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JUL 25 1988
WATER COMPLIANCE SECTION
EPA - REGION 10

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOL	COLOR	OTHER
001	none	none	none	none	none	none	none

(Sections M and N: Complete as appropriate for sampling inspections)

SECTION M - Sampling Inspection Procedures and Observations *(Further explanation attached ____)*

- [x] GRAB SAMPLES OBTAINED
- [ ] COMPOSITE OBTAINED
- [ ] FLOW PROPORTIONED SAMPLE
- [ ] AUTOMATIC SAMPLER USED
- [ ] SAMPLE SPLIT WITH PERMITTEE
- [x] CHAIN OF CUSTODY EMPLOYED
- [ ] SAMPLE OBTAINED FROM FACILITY SAMPLING DEVICE

COMPOSITING FREQUENCY _____ PRESERVATION _____

SAMPLE REFRIGERATED DURING COMPOSITING: ☐ YES ☐ NO

SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE Yes

	SAMPLE MEASUREMENT				002
	PERMIT REQUIREMENT				
	SAMPLE MEASUREMENT			<	
TSS	PERMIT REQUIREMENT			30	
T. Rec. As mg/l	SAMPLE MEASUREMENT			<.010	
	PERMIT REQUIREMENT			.49	
T. Rec. Cd. mg/l	SAMPLE MEASUREMENT			<.001	
	PERMIT REQUIREMENT			.0053	
T. Rec. Cu mg/l	SAMPLE MEASUREMENT			<.010	
	PERMIT REQUIREMENT			.0245	
T. Rec. Pb. mg/l	SAMPLE MEASUREMENT			<.003	
	PERMIT REQUIREMENT			.0150	
T. Rec. Hg. mg/l	SAMPLE MEASUREMENT			<.0005 ~~<.0005~~	
	PERMIT REQUIREMENT			non-det.	
T. Rec. Zn. mg/l	SAMPLE MEASUREMENT			.014	
	PERMIT REQUIREMENT			.163	
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOL	COLOR	OTHER
002	NONE	NONE	NONE	NONE	NONE	NONE	NONE

(Sections M and N: Complete as appropriate for sampling inspections)

SECTION M - Sampling Inspection Procedures and Observations *(Further explanation attached ____)*

- ☑ GRAB SAMPLES OBTAINED
- ☐ COMPOSITE OBTAINED
- ☐ FLOW PROPORTIONED SAMPLE
- ☐ AUTOMATIC SAMPLER USED
- ☐ SAMPLE SPLIT WITH PERMITTEE
- ☑ CHAIN OF CUSTODY EMPLOYED
- ☐ SAMPLE OBTAINED FROM FACILITY SAMPLING DEVICE

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COMPOSITING FREQUENCY _____ PRESERVATION _____

SAMPLE REFRIGERATED DURING COMPOSITING: ☐ YES ☐ NO

SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE yes.